

EV-F12CHAN transmitter Operational Description

The EV-F12CHAN transmitter is a low powered, hand held unit for remote controlling the home security and other features. See the function descriptions in attached. The transmitter is powered by a 6 volt battery. It is designed to operate on a single fixed frequency at 433.92 MHz. See the attached block diagram and schematic.

There are 4 buttons trigger the integrated circuit (U1) which produces the digital control signals and will modulate the carrier signal (ASK). The carrier signal is generated by a S.A.W oscillator/amplifier circuit comprised of a 433.92 MHz crystal (X1) and npn transmitter (Q1). The modulated output of the RF stage is coupled to the strip antenna. The strip antenna is attached on PCB around 60mm.

The transmitter is manually operated by the buttons pushed momentarily within 0.2 second and will automatically deactivate send signal to receiver. This feature is incorporated by the U1 internally.

All tuning and verification are performed by the manufacture and there are no adjustments can be made by user.